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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

COR00259P00031US

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on **March 8, 2007**

Signature

Typed or printed name

Corinne Byk

Application Number

10/725,097

Filed

December 1, 2003

First Named Inventor

J. Michael Corrigan

Art Unit

1761

Examiner

Reginald Alexander

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒

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March 8, 2007

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NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒*Total of **One** forms are submitted.

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Pre-Appeal Brief Request for Review
Serial No.: 10/725,097
Docket No.: COR00259P00031US

STATEMENT FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

Claims 1-17 are pending in the application. Claims 14-17 are withdrawn from consideration. Claims 1-13 are rejected and are at issue.

The clear errors in the Examiner's rejection relate to incorrect and non-supportable statements on what is disclosed in Faddis et al. U.S. Patent No. 5,344,622.

Claims 1, 5 and 10 are rejected as obvious over Faddis et al.

Independent claim 1 specifies an improvement in a humidification system including an atomizing nozzle, a water supply and a control selectively supplying pressurized water from the supply to the atomizing nozzle so that atomized vapor is provided. The improvement comprises an ozone generator and an air compressor operatively connected between the ozone generator and the atomizing nozzle for delivering pressurized ozone to the atomizing nozzle so that the nozzle delivers ozonated vapor.

As is apparent in claim 1, the atomizing nozzle receives both pressurized water and pressurized ozone as inputs and has an output in the form of ozonated vapor. Faddis et al. uses different structure for utilizing ozone as a sterilization agent.

Faddis et al. uses a generation tube 79 for delivering an oxygen ozone mixture to a line 81a. There is no air compressor. A stepper motor actuator 85 supplies a measured amount of water from a reservoir 84 to a humidity chamber 83. The heating block 88 in the humidity chamber 83 expands the water into water vapor into a line 93 that may contain a nozzle 94. The nozzle 94 creates turbulence in the water vapor so that the water vapor mixes with the ozone oxygen mixture in a T connector 95 into a line 83. A pump 87, downstream of the T connector 95, urges the humidified oxygen ozone mixture to the sterilizer chamber 35.

The action references element 94 as an atomizing nozzle. There is no disclosure or suggestion that the nozzle 94 is an atomizing nozzle. The nozzle 94 could not be an atomizing nozzle. The action states that the claim provides no structure which would define the atomizing nozzle over Faddis et al. This is incorrect. Claim 1 specifies that pressurized water and pressurized ozone are delivered to the atomizing nozzle. One skilled in the art will understand in

the context of the claims what is meant by an atomizing nozzle. Indeed, Dettling et al, also cited by the examiner, see below, discusses atomization at col. 6, lines 23-28, and describes atomization consistent with that described in the present application. The examiner is effectively ignoring the limitation that the claimed nozzle is an atomizing nozzle. Instead, Faddis et al. discloses a nozzle that creates turbulent flow downstream to promote mixing with the oxygen ozone mixture. There is no disclosure or suggestion of atomization.

The action references element 85 as a control, with no explanation of the function of the control. The claim specifies a control selectively supplying pressurized water from a supply to an atomizing nozzle. Element 85 is a stepper motor actuator for supplying a measured amount of water to the humidity chamber. There is no disclosure or suggestion that this supplies pressurized water. Indeed, pressure is created by a heating block that the water expands as it is converted to water vapor by heat. The action refers to element 87 as an air compressor. Element 87 is a pump. There is no disclosure or suggestion that it is an air compressor.

The action admits that Faddis et al. does not disclose the recited location of the air compressor. In fact, Faddis et al. does not disclose any air compressor. A pump is not an air compressor. In the claimed invention, the air compressor is connected between the ozone generator and the atomizing nozzle. The action indicates that it would have been obvious to rearrange the location of element 87. There is no support for such a statement. The pump 87 is used for urging the water vapor and ozone oxygen mixture into the sterilizer chamber. The action suggests that the elements could be rearranged. However, it is not apparent where the pump 87 would be placed. If the pump 87 were placed upstream of the T connector 95, then it would urge the ozone into the T connector. However, this could preclude proper mixing with the water vapor. In any event, placing it in this location would not result in delivering pressurized ozone to the atomizing nozzle. Such rearrangement would require repositioning both the pump 87 and the ozone line 81 upstream of the nozzle 94. Doing so would serve no purpose. Indeed, it would likely render the device inoperative.

Claim 1 is clearly not obvious over Faddis et al.

Independent claim 5 specifies a humidification system for a product holding space including an air atomizing nozzle positioned proximate the product holding space and including a water inlet and an air inlet. A water supply and a control selectively supply pressurized water from the supply to the atomizing nozzle water inlet. An air compressor is operatively connected between an ozone generator and the atomizing air nozzle air inlet for delivering pressurized ozone to the atomizing nozzle so that the nozzle delivers ozonated vapor into the product holding space.

Claim 5 is not obvious over Faddis et al. for the same reasons discussed above relative to claim 1. Moreover, Faddis does not disclose a nozzle including a water inlet and an air inlet. The nozzle 94 in Faddis et al. receives water vapor. There is only a single inlet. The action does not address these differences. Claim 10 depends from claim 5 and is believed allowable for the same reasons therefor.

Claims 2-4 and 6-8 are rejected as obvious over Faddis et al. in view of Karlson. Karlson is cited for disclosing an air inlet filter, air dryer and muffler. Karlson does not disclose or suggest the deficiencies noted with respect to Faddis et al.

The rejection of claims 2-4 and 6-8 is likewise improper.

The rejection of claims 1, 5, 9 and 11-13 as obvious over Dettling et al. in view of Faddis et al. is improper. The error in this rejection is in the alleged basis for the combination.

Dettling et al. and Faddis et al. are not properly combined.

The deficiencies with respect to Faddis et al. and the errors in describing the teachings of Faddis et al. are noted above.

Dettling et al. discloses a basic humidification system for a display case or the like particularly for perishable food products. This system uses atomizing nozzles. The system in Dettling et al. is generally consistent with that discussed under the heading "Background of the Invention" of the instant application. Such a system is used for providing hydration.

The system of Faddis et al. is used for medical instrument sterilization that uses ozone as a sterilization agent. It is not apparent from either of the references that it would be appropriate to use a sterilization agent in a hydration system used for fresh and/or perishable food products as in Dettling et al.

The Examiner has merely selected elements out of Faddis et al. and combines them with the teachings of Dettling et al. However, there is no disclosure or suggestion that these elements may be combined to form a system similar to that set forth in independent claims 1 and 5 herein. Moreover, it is not apparent how these elements would be combined. The Faddis et al. reference injects ozone into a line of water vapor. It is not apparent where ozone would be or could be introduced into the system of Dettling et al. Nor has the Examiner presented a convincing line of reasoning why such a combination of elements would have been obvious. Therefore, the rejection is improper. See Ex parte Clapp, 227 USPQ 972 (PTO Bd. of Appeals 1985). The alleged reason for the combination cited in the action is to provide for sterilization and humidification of food items within a display case. However, it is not apparent that there is any need or advantage to provide sterilization of food products, absent reading applicant's disclosure. Medical products are sterilized and remain so to avoid infection and the like in medical procedures. It is not apparent that perishable food products in a display case would have any need for sterilization as they are displayed in an unsterile environment. The Examiner is relying on hindsight based on applicant's invention described herein. Such use of hindsight is improper. Neither reference suggests any desirability of sterilizing food products.

For these reasons, claims 1 and 5, and claim 9, which depend from claim 5, are not obvious.

Independent claim 11 specifies a humidification system for a refrigerated display case comprising a plurality of air atomizing nozzles positioned proximate the display case and each including a water inlet and an air inlet. A water supply and a control selectively supply pressurized water from the supply to the atomizing nozzle water inlets. An air compressor is

operatively connected between an ozone generator and atomizing nozzle air inlets for delivering pressurized ozone to the atomizing nozzle so that the nozzle delivers ozonated vapor into the display case.

Independent claim 11 is allowable for the same reasons discussed above relative to claim 5. Claims 12 and 13 which depend from claim 11 are likewise allowable.

For the above reasons, claims 1, 5, 9 and 11-13 are allowable and withdrawal of the rejection is requested.

Applicant traverses the rejection of claims 2-4 and 6-8 as obvious over Dettling in view of Faddis et al. and Karlson.

Claims 2-4 and 6-8 depend from claims 1 and 5, respectively. The deficiencies with respect to Dettling and Faddis are discussed above. Karlson is merely cited for use of an air inlet filter, air dryer and muffler connected to an inlet of an ozone generator. It does not disclose or suggest the deficiencies noted above with respect to Dettling and Faddis et al. and claims 1 and 5.

For the above reasons, claims 2-4 and 6-8 are believed allowable and withdrawal of the rejection is requested.

Summarizing, no proper combination of the references discloses or suggests use of ozone in connection with a humidification system using an air atomizing nozzle. Particularly, none of the references suggest the desirability of providing ozone for use in a produce display case or the like.

Withdrawal of the rejections and allowance are requested.